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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/826,804	04/06/2001	Masaomi Takagi	040679/1246	6447

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FOLEY AND LARDNER  
SUITE 500  
3000 K STREET NW  
WASHINGTON, DC 20007

EXAMINER

CULBRETH, ERIC D

ART UNIT	PAPER NUMBER
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3616

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DATE MAILED: 02/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/826,804

Applicant(s)

TAKAGI ET AL.

Examiner

Eric D Culbreth

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-17 and 23-29 is/are pending in the application.
- 4a) Of the above claim(s) 1-4, 6-8 and 17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-16 and 23-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 1/12/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

DETAILED ACTION

*Claim Rejections - 35 USC § 112*

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 13 and 29 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. These claims refer to either a cylindrical surface or curved portions, and depend from claim 9, which recites the finished product (a pair of cross members and a pair of side members). There is no disclosure in the original specification of a finished vehicular member construction with side and cross members that includes curved portions or a cylindrical surface (all the figures with with curved portions or cylindrical outer surfaces refer to the pipe before hydroforming or to related art).

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 23-26 and 28-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 23-24 are inaccurate in reciting the thin and thick wall portions as convex and concave inner and outer walls (the wall portions do not include the curvature at the intersection of the wall portions and the adjacent walls). Claim 24, in reciting the thick wall portion having a convex outer and inner wall, is apparently drawn to Figure 6(d). However, this contradicts claim 9 from which claim 24 depends, which recites the thin wall portion as free from inscribed mating with the thick wall portion (in Figure 6(d), the thick wall portion connects with the thin wall portion). Similarly, regarding claims 25 and 28, there is no disclosed embodiment with thin and thick wall portions that are free from mating yet has a plurality of thin and thick wall portions. Regarding claims 26 and 29, there is no embodiment that has thick and thin portions free of inscribed mating yet has four thin wall portions and four thick wall portions.

***Claim Rejections - 35 USC § 103***

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 9-16 23-29 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 61-291272 in view of Japanese Patent 6-99870 (both of record).

Japanese '272 discloses hollow side members 1, 2 with thick and thin wall portions in Figure 5 and cross members 3, 3, 3, 3 interconnecting the side members. However, Japanese '272 does not clearly disclose monolithic thick and thin wall portions (as the dictionary definition of "monolithic" includes "solid" and "uniform", the thick and thin portions welded

together in Japanese '272's Figure 5 could be considered to make a solid and uniform or monolithic structure). Japanese '272 also does not teach the thin wall portion free from an inscribed mating with the thick wall portion. Japanese '870 discloses in Figure 4 a monolithic side wall 5 with thick and thin portions. Japanese '870's thick wall portion o is free from inscribed mating with the thin wall portion I in Figure 4, the portions separated by upper and lower walls of intermediate thickness much as applicant's Figures 6(a)-6(c). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Japanese '272 to include monolithic thick and thin portion side walls free from inscribed mating as taught by Japanese '870 in order to extrude the side frames (English Abstract) and hence simplify production (claim 9). Applicant's arguments on pages 10-11 of the 1/12/04 amendment that it would be simpler to weld the two C-shaped members and that the C-shaped members may already be extruded are not persuasive because extruding the entire hollow section as one piece would simplify the frame members at least in that welding would now not be required (i.e., one less step in production). As to the argument that working with extruded aluminum is complicated, as claim 9 does not require aluminum, and as the combination does not necessarily include all the features of each reference (i.e., a combination of references is not a bodily incorporation of parts), the combination meets claim 9. In the claims where aluminum or aluminum alloy is claimed, as applicant has noted above, Japanese '272's frame may already have extruded parts; hence it would still be a simplification to extrude the entire side member because welding at least is eliminated. Regarding the arguments on page 12 that Japanese '272 is not monolithic, as broadly recited the reference could be considered monolithic as explained above, and at any rate in the combination Japanese '870 clearly teaches a monolithic structure as

claimed. The argument on page 12 of the 1/12/04 amendment that the modification would change the operation of the references is not persuasive, as extruding a monolithic frame member (Japanese '870) as opposed to welding two pieces together to form the frame member (Japanese '272) results either way in a rigid frame member.

In the combination Japanese '870 teaches in the abstract aluminum extruded material as well as bent side frames 5 in Figure 2 with longitudinal thick and thin wall portions in Figure 4 (claims 10-12).

As noted above, claim 13 is really drawn to the shape of the pipe before hydroforming as noted above. The shape of the pipe before the final product is not patentably distinguishing in a claim drawn to the final product (MPEP 2113).

Regarding claim 14, in Japanese '272 bracket 7 is attached to the outer thick wall 11 for linking the side member and a wheel as functionally recited (i.e., "for linking a side member and a wheel"). The manner in which the walls are formed (claim 15) is not patentably distinguishing in an article claim and the dies used for making the member (claim 16) are not patentably distinguishing, since the preamble of the claim(s) defined the invention as a vehicular member construction.

Regarding claim 23, in the combination Japanese '870's thick and thin wall portions o, i have convex outer wall and concave inner walls inasmuch applicant's invention at the upper and lower corners in Figure 4. As the recitations of convex and concave outer and inner walls are indefinite, the combination meets the positive limitations of claim 24. Similarly, as claims 25-26 and 28-29 are inaccurate to the invention, the combination meets the positive limitations of the

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claim. As functionally and broadly recited, the inner wall portion of Japanese '870 in the combination is free of a circumscribed mating with the thick wall portion (claim 27).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric D Culbreth whose telephone number is 703/308-0360. The examiner can normally be reached on Monday-Thursday, 9:30-7:00 alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 703-308-2089. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Eric D Culbreth  
Primary Examiner  
Art Unit 3616

*Eric Culbreth*

*2/9/04*

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